

WHAT IS CLAIMED IS:

1. A hybrid vehicle drive control apparatus, comprising:
an electric generator mechanically connected to an engine so as to have a differential rotation with respect to the engine;
a generator brake for mechanically stopping a rotation of the generator; and
a controller that gradually decreases a generator torque while engaging the generator brake.
2. The hybrid vehicle drive control apparatus according to claim 1, wherein upon a generator brake engagement request, the controller sets a target generator rotation speed at zero and performs a rotation speed control of the generator.
3. The hybrid vehicle drive control apparatus according to claim 1, wherein the controller gradually decreases the generator torque after an elapse of a predetermined time following engagement of the generator brake.
4. The hybrid vehicle drive control apparatus according to claim 1, wherein the controller gradually decreases the generator torque by performing a rotation speed control of the generator.
5. The hybrid vehicle drive control apparatus according to claim 1, wherein the controller gradually decreases the generator torque by gradually decreasing an integral component that occurs after a proportional component reaches zero in a PI control.
6. The hybrid vehicle drive control apparatus according to claim 1, wherein the controller gradually decreases the generator torque by performing a torque control of the generator.
7. A method of operating a hybrid vehicle, comprising:
engaging a generator brake;
mechanically stopping rotation of a generator that is mechanically connected to an engine so as to have a differential rotation with respect to the engine, via the generator brake; and
gradually decreasing a generator torque concurrently with the mechanically stopping.
8. The method of claim 7, wherein upon a generator brake engagement request, a target generator rotation speed is set at zero and a rotation speed control of the generator is performed.
9. The method of claim 7, wherein the generator torque gradually decreases after an elapse of a predetermined time following engagement of the generator brake.

10. The method of claim 7, wherein the generator torque gradually decreases by performing a rotation speed control of the generator.

11. The method of claim 7, wherein the generator torque gradually decreases by gradually decreasing an integral component that occurs after a proportional component reaches zero in a PI control.

12. The method of claim 7, wherein the generator torque gradually decreases by performing a torque control of the generator.

13. A program for a hybrid vehicle that has an electric generator mechanically connected to an engine so as to have a differential rotation with respect to the engine and a generator brake for mechanically stopping a rotation of the generator, comprising:

a routine that gradually decreases a generator torque while engaging the generator brake.

14. The program of claim 13, wherein upon a generator brake engagement request, a target generator rotation speed is set at zero and a rotation speed control of the generator is performed.

15. The program of claim 13, wherein the generator torque gradually decreases after an elapse of a predetermined time following engagement of the generator brake.

16. The program of claim 13, wherein the generator torque gradually decreases by performing a rotation speed control of the generator.

17. The program of claim 13, wherein the generator torque gradually decreases by gradually decreasing an integral component that occurs after a proportional component reaches zero in a PI control.

18. The program of claim 13, wherein the generator torque gradually decreases by performing a torque control of the generator.